

SUMMARY OF THE INVENTION

[0011] Therefore, a need has arisen for an improved epidural anesthesia kit and method that address shortcomings of previous epidural processes and kits.

[0012] According to an aspect of the present invention, an epidural kit for quickly administering epidural anesthesia to a patient includes a packaging towel; a skin preparation package that is ready to be opened and used to prepare a patient's skin for penetration by needles before having to further open the kit; a first syringe pre-filled with a local anesthetic; an epidural needle for locating an epidural space of a patient; a catheter for positioning in the epidural space of a patient through the epidural needle; a second syringe pre-filled with a test fluid; a preloaded cup having a removable lid and filled with a saline solution; a tray for holding and removeably securing the first and second syringes, epidural needle, and saline cup; and a package for enclosing the tray in a sterile environment.

[0013] According to another aspect of the present invention, an anesthesia kit includes an outer tray; a packaging towel disposed within an interior portion of the outer tray; a plurality of syringes disposed within the outer tray and on the interior of the packaging towel; and a skin-preparation package located on the exterior of the packaging towel to provide for access to the skin-preparation package without requiring access to the interior of the packaging towel.

[0014] According to another aspect of the present invention, an anesthesia kit includes an outer tray; a packaging towel disposed within an interior portion of the outer tray; a skin preparation package secured relative to the outer tray; and a plurality of syringes pre-filled with an injectable fluid and disposed within the outer tray and on an interior of the packaging towel.

[0015] According to another aspect of the present invention, an anesthesia kit includes an outer tray; a packaging towel disposed within an interior portion of the outer tray; a cup having a removeable, sealed lid and containing an injectable fluid; and a plurality of syringes disposed within the outer tray and on the interior of the packaging towel.

[0016] According to another aspect of the present invention, a method of manufacturing an epidural anesthesia kit includes the steps of providing an outer tray; providing an inner-tray having compartments for holding objects secure; filling a local anesthetic syringe; filling a test-dose syringe; placing the local and test-dose syringes into the inner-tray; filling a cup with saline and sealing it with a removeable lid; placing the saline cup in the inner tray; placing an epidural syringe, catheter, and epidural needle on the inner tray; placing the inner-tray on a packaging towel; placing the packaging towel in the outer tray; folding the packaging towel about the inner tray; sealing the top portion of the outer tray with a top-sealing sheet; and removeably securing a skin-preparation package to an outer portion of the packaging towel or an outer portion of the top sheet so that the skin-preparation package may be accessed without requiring the packaging towel to be unfolded.

[0017] According to another aspect of the present invention, a method of administering an epidural block using an epidural kit includes opening the anesthesia kit and accessing a skin-preparation package before unpackaging the

remainder of the kit, using a plurality of pre-loaded syringes, and using a pre-filled saline cup.

[0018] The present invention provides advantages, and a few examples follow. An advantage of the present invention is that it allows for faster implementation of epidural anesthesia—something both the patient and healthcare provider want. Another advantage is that the present kit and method enhance safety by removing any risk of injury to the healthcare provider's hands due to broken glass vials as well as any risk of glass shards remaining in any of the liquids administered to the patient.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] For a more complete understanding of the present invention and advantages thereof, reference is now made to the following description taken in conjunction with the accompanying drawings in which like reference numbers indicate like features, and wherein:

[0020] **FIG. 1** is a schematic, perspective view of an anesthesia epidural kit according to the present invention;

[0021] **FIG. 2** is the kit of **FIG. 1** with the top-sealing sheet removed;

[0022] **FIG. 3** is a schematic, perspective view of the interior tray or subtray of the kit of **FIGS. 1-2** with various illustrative components that accompany the tray; and

[0023] **FIG. 4** is a schematic perspective view of a sealed container for use according to an aspect of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0024] The preferred embodiment of the present invention and its advantages are best understood by referring to **FIGS. 1-4** of the drawings, like numerals being used for like and corresponding parts of the various drawings.

[0025] Referring to **FIG. 1**, a prepared epidural kit or packaged tray **10** according to one embodiment of the present invention is shown. Kit **10** has an outer tray **12** formed with four sidewalls **14, 16, 18, 20** and a bottom **22** (**FIG. 3**). Outer tray **12** is preferably formed of plastic. A top opening formed by the four walls is shown sealed with a top-sealing sheet **24**, which is preferably made from a strong, but pliable material, such as a TYVEK® material. The top-sealing sheet **24** would typically have visual indicia **26** printed on it, such as descriptions of how to use the product and its contents.

[0026] Referring to **FIG. 2**, the epidural kit **10** is shown with top-sealing sheet **24** removed. As an important aspect of the present invention, a skin-preparation package **28** is immediately available upon removing the top sheet **24**. Thus, it is shown resting on top of folded packaging towel **30**. The skin-preparation package **28** preferably contains a presoaked preparation swab, sponge, applicator, or the like, that is soaked in Betadine or another antiseptic solution (e.g., alcohols, iodophors, chlorhexadine, chlorhexadine gluconate with isopropyl alcohol, etc.). Use of certain skin preparation solutions, such as 2% chlorhexidine gluconate with 70% isopropyl alcohol may allow quicker drying times—on the order of 30 seconds—compared to Betadine which may require minutes. By having the skin-preparation package **28**